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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/485,421	10/05/2000	Sundarasamy Mahalingam	UPAP-0350	1903

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COZEN O'CONNOR, P.C.
1900 MARKET STREET
PHILADELPHIA, PA 19103-3508

EXAMINER

LI, QIAN JANICE

ART UNIT	PAPER NUMBER
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1632

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Supplemental
Notice of Allowability**

Application No.

09/485,421

Examiner

Q. Janice Li

Applicant(s)

MAHALINGAM ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to _____.
2. ☒ The allowed claim(s) is/are 28-47.
3. ☒ The drawings filed on 2/10/00 & 2/20/02 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

SUPPLEMENTAL EXAMINER'S AMENDMENT

Upon further review, a supplemental examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Daniel M. Scolnick on August 17, 2004.

The claims have been amended as follows:

Claim 28 (currently amended) A conjugated composition comprising ~~at least one~~ a nuclear localization sequence fragment of HIV-1 Vpr protein (SEQ No: 1) consisting of amino acid sequence 17-36 of said HIV-1 Vpr protein and/or a nuclear localization sequence fragment of HIV-1 Vpr protein (SEQ No: 1) consisting of amino acid sequence 59-84 of said HIV-1 Vpr protein, conjugated to a therapeutic compound, wherein said therapeutic compound is a nucleic acid molecule.

Claim 32 (currently amended) A method of delivering a therapeutic compound to the nucleus of a cell comprising the step of:

Contacting said cell with a conjugated compound, wherein said conjugated compound comprises said therapeutic compound conjugated to ~~at least one~~ a nuclear localization sequence fragment of HIV-1 Vpr protein (SEQ No: 1) consisting of amino

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acid sequence 17-36 of said HIV-1 Vpr protein and/or a nuclear localization sequence fragment of HIV-1 Vpr protein (SEQ No: 1) consisting of amino acid sequence 59-84 of said HIV-1 Vpr protein; wherein said therapeutic compound is a nucleic acid molecule, and wherein said conjugated compound is taken up by said cell and localized to the nucleus of said cell.

Claim 37 (currently amended) A conjugated composition comprising a nuclear localization sequence fragment of HIV-1 Vpr protein (SEQ No: 1) comprising amino acid sequence 17-36 of said HIV-1 Vpr protein and/or a nuclear localization sequence fragment of HIV-1 Vpr protein (SEQ No: 1) comprising amino acid sequence 59-84 of said HIV-1 Vpr protein, conjugated to a therapeutic compound, wherein said fragment of HIV-1 Vpr protein is less than 50 amino acids.

Claim 43 (currently amended) A method of delivering a therapeutic compound to the nucleus of a cell comprising the step of:

Contacting said cell with a conjugated compound, wherein said conjugated compound comprises said therapeutic compound conjugated to a nuclear localization sequence fragment of HIV-1 Vpr protein (SEQ No: 1) comprising amino acid sequence 17-36 of said HIV-1 Vpr protein and/or a nuclear localization sequence fragment of HIV-1 Vpr protein (SEQ No: 1) comprising amino acid sequence 59-84 of said HIV-1 Vpr protein; wherein said fragment of HIV-1 Vpr protein is less than 50 amino acids, and

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wherein said conjugated compound is taken up by said cell and localized to the nucleus of said cell.

Conclusion

Claims 28-47 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Q. Janice Li** whose telephone number is 571-272-0730. The examiner can normally be reached on 9:30 am - 7 p.m., Monday through Friday, except every other Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Amy Nelson** can be reached on 571-272-0804. The fax numbers for the organization where this application or proceeding is assigned are **703-872-9306**.

Any inquiry of formal matters can be directed to the patent analyst, **Dianiece Jacobs**, whose telephone number is (571) 272-0532.

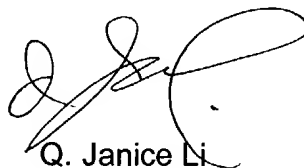
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image

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For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.



Q. Janice Li
Primary Patent Examiner
Art Unit 1632



August 17, 2004